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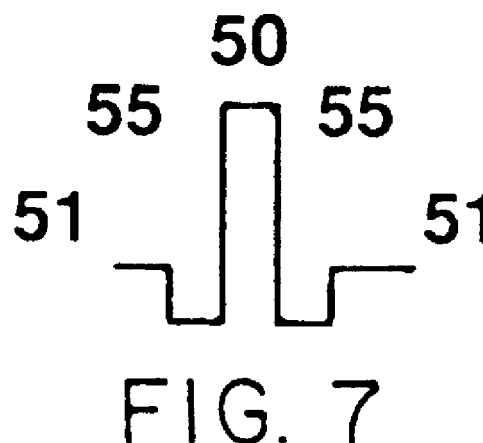
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(54) **Dispersion compensating fibers and systems**

(57) A silica based dispersion compensating optical waveguide fiber includes a core region and a surrounding clad layer. The core region has a refractive index profile which includes a central core region doped with an index raising dopant having a positive central core region index of refraction with a positive Delta %, surrounded by a core moat region having a negative moat region index of refraction with a negative Delta %. The clad layer has a clad index of refraction, said central core region index of refraction being greater than said clad index of refraction which is greater than said core moat region index of refraction. The fiber has a dispersion D_{dcf} more negative than -20 ps/nm-km at a given wavelength in the range of 1520nm to 1565nm, an attenuation at the given wavelength in the range of 1520nm to 1565nm less than 1 dB/km with a negative average dispersion slope S_{dcf} (ps/nm²) in the wavelength range of 1520nm to 1565nm, and the dispersion at the given wavelength in the range of 1520nm to 1565nm divided by the attenuation at the given wavelength in the range of 1520nm to 1565nm is more negative than -120 ps/nm-dB.



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EUROPEAN SEARCH REPORT

Application Number
EP 99 10 8801

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	PATENT ABSTRACTS OF JAPAN vol. 012, no. 161 (P-702), 17 May 1988 (1988-05-17) & JP 62 275204 A (FUJITSU LTD), 30 November 1987 (1987-11-30) * abstract * & JP 62 275204 A (FUJITSU LTD) 30 November 1987 (1987-11-30) * page 19, right-hand column, line 19 - line 29 * * figures 3-5 *	1-16	G02B6/16 H04B10/18
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D,A	--- US 4 372 647 A (OKAMOTO KATSUNARI ET AL) 8 February 1983 (1983-02-08) * abstract * * figure 1 *	1	
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 6 March 2000	Examiner Ribbe, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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